

RESIDENTIAL CONSTRUCTION PACKET

REVISED FEBRUARY 4, 2010

Residential Plan Review is 5 – 10 business days

EROSION CONTROL

- Lots to be mowed regularly as needed to keep ground cover less than 12 inches.
- During construction removal of natural ground cover should be as limited as possible during installation of: building, sewer, water service and foundation.
- If lots do not have complete natural ground cover lot owner must install and maintain silt screen or curlex systems.
- Staggered bales and curlex roll systems should be installed and maintained at lowest point of swale to control runoff.
- All storm drain inlets to have silt screen or curlex rolls installed and maintained. Storm
 inlet protection must follow SWPPP plans submitted by developer and be compliant
 with applicable TCEQ and City of Wylie rules, regulations and ordinances.
- Streets are to be cleaned of any silt, sediment, or runoff within 24 hours of rain event or during the next business day.
- Mud carried to the street by vehicles leaving lots is to be cleaned up immediately.
- Concrete spillage is to be cleaned up immediately.
- Must have assigned concrete wash-out area on site with directional signage to lot. Lot must have a sign.
- Failure to install and properly maintain erosion control systems can result in:

Re-inspection fee(s)

Citations

Inspections being placed on hold

Subdivision being closed

The above items are subject to Supervisory discretion.

BUILDING FINAL

 Required subdivision specific landscape and sod must be in place to remove silt screen/curlex systems. Erosion control measures must be installed and maintained around all unsodded yard/lots that do not have complete natural ground cover.

- May install two (2) foot wide strips of sod along perimeter of unsodded area as erosion control with remainder to be installed within thirty(30) days.
- Hydro mulch may be substituted but must be applied to complete lot and repaired within twenty four (24) hours after rain event where wash off occurred.

GENERAL REQUIREMENTS

No construction other than setting form boards and lot grading, may begin until a building permit has been issued.

Instruct all subcontractors and their employees to park in such a way that emergency vehicular traffic will not be obstructed, i.e. fire trucks, ambulances and police.

Building addresses must be posted in a location that is visible from the street on each lot at all times. Numbers must be a minimum of four (4") inches in height with contrasting colors.

Addresses must be posted on all temporary electrical poles minimum of four (4") inches in height with contrasting colors.

Because of serious safety considerations citations will be issued to the job superintendent, electrician, electrical contractor or an officer of the general contractor if temporary power is tied directly into the permanent breaker box.

An eight by eight by four foot high (8'x8'x4') trash container (bin) is required on the job site prior to beginning any work. The trash bin must be four (4) sided and made with solid materials. NOTE: For uniformity, locate all trash containers in the front yard between the house and the street. Other locations must be approved by the Building Official, Assistant Building Official or Chief Building Inspector.

All re-inspection fees must be paid prior to the request of any further inspections. When a re-inspection is requested on a project and a re-inspection fee has not yet been paid, the inspection will be cancelled in the office.

No extension cords can be ran across the streets, this may result in the issuance of a citation.

GENERAL INSPECTION NOTES

All inspections must be requested by calling our automated inspection line. The telephone number is 972-442-8149. You will need your contractor access code, your permit number and you inspection code number in order to use this service. Inspections can be requested as late as 8:00 am for a same day

inspection. If the automated inspection lines is down you have until 8:45 a.m. to request a same day inspection by calling 972-442-8159.

Office hours for inspectors are from 8:00 a.m. - 9:00 a.m. and from 4:00 p.m. - 5:00 p.m. each day. Technical questions must be directed toward the inspectors during the above listed office hours. Please call the inspector after 4:00 p.m. for clarification of a disapproval (red-tagged item).

You may call the inspectors for a two (2) hour window of time between 8:30 a.m. and 9:00 a.m.

Building Inspector Direct Lines

 David Collins
 972-442-8153

 Keith Moore
 972-442-8167

 Paul Mort
 972-442-8163

Todd White 972-442-8156 Chief Building Inspector/Plans Examiner

For general questions and for permit information you may call the office at 972-442-8150. Contractor working hours per City of Wylie Ordinance are Monday – Saturday from 6:00 a.m. to 9:00 p.m. No work is to be performed on Sunday or Holidays.

Re-Inspection fees

A re-inspection fee is \$50.00 and must be paid before any further inspections can be performed. A re-inspection fee will be assessed when any of the following conditions apply:

- House not dried-in (consisting of roof boots, chimney cap, windows and installation of doors).
- The inspection called for is not ready. This could include a first-time inspection or where a history has developed for deficient items on a continual or repeated bases.
- City approved plans not on the job site and located as specified in below.
- Trash on lot or no trash bin on site.
- House is locked or work to be inspected is not otherwise accessible.
- An inspection is disapproved for the same item. (Previous tag items not corrected).
- Panel cover is not removed for Temporary Cut In Electrical inspection or is not installed at building final.
- A safety fence is not installed around sewer tap excavations that are four (4') feet deep or more.
- No form board survey is on the job when a plumbing site/slab inspection is requested.
- Construction materials are located within the right-of-way as specified in the section below.
- If the water meter or sewer tap is not connected when the plumbing site/slab is requested.
- No address posted.

• If ten (10) items are found during the inspection it will be stopped and disapproved with a fee. Once the fee is paid a complete inspection shall be performed.

City approved building plans must be available on the job site when all inspections are conducted or fee will be accessed.

Materials located in the right-of-way

All dirt, and or any type of construction material must be located in such a way as to comply with the following requirements.

- If no city sidewalk has been constructed on the property, all construction materials must be located five (5') feet from the back of the curb to allow for pedestrian passage through the property.
- If a sidewalk does exist, construction materials must be placed behind the sidewalk.
- At all times during construction, the water meter box must be installed around the water meter.

Location of permit packets and inspection tags

In order to allow for uniformity and the most efficient use of time the permit packets must be on the construction site at the location specified below. Inspection tags will be placed inside the permit packet by the inspector once the inspection is completed. The inspection tag must remain on the construction side, with the permit packet at all times.

- T-Pole, Plumbing site/slab and Foundation The permit packet must be located on the side of the trash bin that is facing the street. The trash bin must be located in the front yard of the lot.
- MEP's wall/ceiling, Frame and All Finals The permit packet must be adjacent to the front door of the house.
- Flatwork The permit packet must be located at the approach or trash bin.
- Temporary Cut In Electric/Gas Electrical Panel

Engineering letters and other required documents

Whenever an engineering letter or other document is required, the original letter must be placed inside the permit packet and visible from outside of the packet. This will allow the inspector to refer to the letter in order to verify compliance with the requirements of the engineer.

Cancellations

Inspections should not be requested until the contractor has verified that the work is complete and ready for inspection. In the event that an inspection must be cancelled, the contractor may cancel the inspection via the automated system no later than 8:00 a.m. the day the inspection is scheduled to be performed. Additionally, contractors may cancel inspections up until 9:00 a.m. the day the inspection is scheduled to be performed by signing the cancellation log in the Building Inspections office.

<u>Inspection results</u>

Inspection results will be left on the jobsite inside of the permit packet. Inspection results will not be given to a contractor over the telephone. If you are unable to locate the permit packet, you may obtain inspection results by visiting the Building Inspection office.

RESIDENTIAL INSPECTIONS REQUIRED

No concrete or plumbing site/slab inspections will be made if it has been determined that it is too wet by the Building Official. All rained out inspections must be recalled by the contractor. Plumbing site/slab inspections may be conducted in wet weather provided that a five (5) p.s.i. air test is placed on the sewer lines, and all plumbing lines are visible. When the inspections are requested, it must be stated that there is an air test on the sewer.

No concrete inspections will be made unless the temperature is at least thirty eight (38) degrees and rising. All inspections cancelled because they do not meet this requirement must be recalled by the contractor.

Temperature must be thirty eight (38) degrees and rising to begin placing concrete and cold weather protection six (6) ml plastic or hydration blanket on site.

Each of the following inspections must be requested in the listed order. If an inspection is requested before a prior required inspection has been approved, no inspection will be conducted.

INSPECTIONS REQUIRED ARE:

Inspections	Code
Temporary Pole	930
Flatwork	950
Electrical Site/Slab Underground	957,958
Plumbing Site/Slab Underground	965,966
Foundation Site	951
Electrical Wall/Ceiling Cover	959,960
Mechanical Wall/Ceiling Cover	962,963

Plumbing Wall/Ceiling Cover	967,968
Framing	955
Temporary Cut in Electrical	924
Temporary Cut in Gas	925

Energy Code Approval Submit to office on City of Wylie form

Electrical Final 961
Mechanical Final 964
Plumbing Final 969
Gas Test 970
Building Final - Life Safety 956

RESIDENTIAL INSPECTION REQUIREMENTS

TEMPORARY POWER POLE (Code 930)

- Double pole/single throw breaker installed for two hundred forty (240) volt plug.
- Single pole breaker installed for one hundred twenty (120) volt plug with GFCI protection on all one hundred twenty (120) volt receptacles.
- Box is to be secured to the pole.
- Pole is to be braced, secure and stable, with two legs and pole.
- A ground rod must be installed with a ground wire that is a minimum size of six (6")
 AWG.
- Citations will be issued to anyone on the T-pole without proper connectors on each end of the cord.
- A legible address number must be posted on the T-pole. Number must be a least for four (4") inches in height with contrasting colors.
- No holes are allowed in the panel face.
- Plugs outside the panel box must be weatherproof.
- All breakers and receptacles must have legible amperage/voltage markings. Damaged poles will have power disconnected ASAP.

FLATWORK (Code 950)

- The city must inspect flatwork. This includes all sidewalks, driveways, patios and approaches. Re-inspection fees will be charged for partial inspections.
- All flatwork must be reinforced with steel. City sidewalks are required to have a minimum of three eights (3/8") inch rebar at twenty four (24") inches on center transversely and eighteen (18") inches on center longitudinally with expansion joints at twenty (20') feet on center.
- Approaches off of alleys must have a depth of six (6") inches and be reinforced with number three (#3) bars eighteen (18") inches on center to the property line. Alley

- approaches must have a turn radius of six (6') feet. The alley must be doweled eighteen (18") inches on center with number three (#3) bars that extend at least six (6") inches into the alley. Do not install an expansion joint at the alley. An expansion joint will be required at the property line.
- Approaches off of a street must have a depth of six (6") inches and be reinforced with number three (#3) steel bars eighteen (18") inches on center to the property line. A turn radius of five (5') feet is required. The street must be doweled eighteen (18") inches on center with number three (#3) bars that extend at least six (6") inches into the street or existing street steel may be used. An expansion joint will be required at the sidewalk. Do not install an expansion joint at the street.
- Drive approaches off of a street must utilize a street cut. Horizontal curb cuts are unacceptable. The street must be cut eighteen (18") inches from the back of the curb.
 The street cut must be straight and smooth. Chipped and jagged portions of the street must be removed.
- Expansion joints must be installed at all existing concrete (except streets and alleys).
- Decorative concrete may be installed only on private property. Any concrete work done within a street or alley easement must be completed with a brush finish.
- The minimum width for a residential driveway is twelve (12") feet. The maximum width for a residential driveway at the property line is twenty four (24') feet per city engineer standard.
- The minimum distance from the property line to a garage is twenty (20) feet.
- The minimum distance from a driveway to a street intersection is forty five (45) feet.
- All driveways, patios and private walkways must be formed to allow the concrete depth to be at least three and five eights (3 5/8") inches thick. Steel reinforcement can be six (6) x (6) number six (#6) gauge wire mats or number three (#3) rebar at twenty four (24") inches on center each way. Driveways and lead walks must have expansion joints every twenty five (25') feet.
- If patio is not set up you can receive a disapproval with fee and on okay to pour
 everything except the patio itself and will need to have the patio inspected at a later
 date.
- Lime used for drying out wet areas shall not be permitted.

ELECTRIC SITE/SLAB UNDERGROUND (Code 957, 958)

- Install grounding system per the 2005 NEC.
- Install in slab electrical per the 2005 NEC.

PLUMBING SITE/SLAB UNDERGROUND (Code 965,966)

If the house is to have gas service with a gas meter located at the alley, the underground gas inspection must be done at the same time as the plumbing site/slab inspection. Failure to have the underground

gas piping ready for inspection when the plumbing site/slab is requested will cause the inspector to classify the job as "not ready" and assess a re-inspection fee. An original form board survey stamped by a licensed surveyor must be located on the construction site and inside the permit packet at the time of inspection. The survey must verify that all property line set back requirements are met.

No plumbing rough inspections will be made if it has been determined that it is too wet. All rained out inspections must be recalled by the contractor. Plumbing site/slab inspections may be conducted in wet weather provided that a five (5) p.s.i. air test is placed on the sewer lines, and all piping is visible. When the inspection is requested, it must be stated that there is an air test on the sewer.

Plumbing site/slab inspections cannot be performed if the temperature is below freezing unless an air test has been placed on the sanitary sewer lines and the water distribution lines. All plumbing site/slab inspections will be cancelled when freezing conditions exist unless it is specified that an air test has been placed on the system.

Water Lines

- One hose bib with non-removable vacuum breaker must be installed in the water line to check the pressure of the copper.
- All hose bibs must have non-removable vacuum breakers installed at all times.
- Water supply lines must be sized in accordance with the 2006 IRC and/or the 2006 IPC.
- Copper lines will not be allowed to touch each other.
- Copper lines must be sleeved or taped. Duct tape is not acceptable for wrapping copper that will be in contact with mortar or cement. Wrap must be ten (10) mil mill wrap.
- The water meter must be installed correctly with arrow pointing toward the house.
- The water meter number must be the same as the number assigned for that lot.
- Lead solder and fluxes containing lead cannot be used to join potable water lines.
- The cover must be removed from water entry box when plumbing rough inspection is requested.
- T & P (pop off) lines for water heaters cannot be run in slab.
- All lines under the slab must be type "M" copper or thicker, PEX-AL-PEX, CPVC, or PEX.
- All piping located under the slab must be continuous with no joints if possible. Joints
 located under a slab must be done in accordance with the 2006 International Residential
 Code.
- The water meter must be in place with all valves open to allow for testing of the lines at city water pressure. If city water is not available, a fifty (50) p.s.i. air test can be substituted for the water test. A valid air test will not have any water in the lines.
- Where a water service crosses a sewer ditch, the water line must be installed in a PVC sleeve.
- Water service piping shall be provided with a shut off valve near the entrance outside of the dwelling.

Sanitary Sewer

- The plumbing site/slab must be tested with a five (5') foot head of water on all stacks in the house. The five (5') foot measurement will be taken from the top of the ninety (90) degree fitting. If the last stack is too high to see water in the pipe, the inspection is subject to receiving a disapproval tag.
- All stacks on the system must be at least five (5') feet high. Systems that have stacks less than five (5') feet and have a gem cap installed will be disapproved.
- The water test must include the sewer yard line. A test tee must be installed within five (5') feet of the sewer tap. The test must utilize screw-in test ball device that will not allow water to flow into the city sewer (such as 'clean-tap' device).
- A five (5) p.s.i. air test can be substituted for the water test required on the sanitary system line. A valid air test will not have any water in the lines.
- All fixtures must be stacked vented.
- Trap arms shall have no more than seventy two (72") inches on a one and one half (1 ½") inch arm. No more than ninety six (96") inches on a two (2") inch arm.
- Full size double clean outs must be exposed for inspection.
- The sewer tap connection must be exposed for inspection.
- All holes dug for sewer taps that are deeper than four (4') feet must be protected by a temporary construction fence.
- The building sewer must be connected to the city's sanitary sewer system.
- All sewer tap homes must be filled immediately after approval of the plumbing site/slab inspection. If the foundation inspection is requested and performed prior to filing of the hole, the inspection will be classified as not ready and a re-inspection fee will be assessed.
- A minimum four (4") inch building drain (yard line) is required.
- All lines must rest on a two (2") inch bed of sand and all lines, traps and fittings must be completely exposed.
- Air admittance valves are not allowed unless approved by the Building Official prior to installation.
- Island loop vents must utilize the following fittings in the order listed: a forty five (45) degree fitting, a short turn ninety (90) degree fitting and a forty five (45) degree fitting.
- Form board survey must be located in the packed and visible from outside the packet.
- Slope to tap cannot exceed a forty five (45) degree slope.

Gas Test

All gas tests must utilize a diaphragm gage that has been tested and certified.

Diaphragm gages: Diaphragm gages are required for gas tests. Gas lines that require a ten (10) p.s.i. test may be tested three (3) p.s.i. when a five (5) p.s.i. diaphragm gage is used. Gas lines that require a sixty (60) p.s.i. test may be tested at ten (10) p.s.i. when a fifteen (15) p.s.i. diaphragm gage is used. A permanent metal tag is required at the meter, at the entrance into the house (if the gas meter is located at the alley), and at the regulator stating the following: "Warning: one half (1/2") inch to five (5) p.s.i. gas line."

FOUNDATION SITE (Code 951)

All foundation plans and city-stamped plans must be stamped by a professional engineer licensed by the State of Texas.

No concrete inspections will be made if it has been determined that it is too wet. All rained out inspections must be recalled by the contractor.

No concrete inspections will be made unless the temperature is thirty eight (38) degrees or above and rising. Any inspections cancelled because it does not meet this requirement must be recalled by the contractor.

Slab underground electrical must pass prior or at the same time as the foundation. A foundation will not pass until all prior inspections needed have passed.

Post Tension

- Everything must conform with the engineered plans with no addition or subtractions to the approved plans and detail sheet.
- All cables must be straight and level.
- All copper must be sleeved or taped. Duct tape is not acceptable wrap for copper that will be in contact with mortar or cement. Warp must be ten (10) mil mill wrap.
- The post tension drawing must be on the job with the detail sheet and the plot plan (both must be city stamped).
- Cables that must be re-routed to miss plumbing fixtures must be done with long sweeping curves of the cable one (1") inch per foot of cable length, may reset heads by twelve (12") inches at one (1) end.
- Electrical conduit located in the foundation must be installed and inspected.
- Jenn Air ducts or other similar down draft vent systems must be installed.
- All gas line sleeves must be installed.

- Original finished floor elevation surveys, if required and engineering letters verifying required piers were installed according to design must be submitted prior to requesting the inspection.
- No changes can be made to the foundation after inspection approval without requesting another foundation inspection and supplying new engineer design with seal.
- Poly must cover entire pad to bottom of beam. Do not put poly in bottom of exterior beam.
- All tub boxes must be installed.
- Sewer lines must run at a ninety (90) degree angle to grade beams.
- Water heater T & P lines cannot be composed of PVC material and cannot be installed in slab.
- Sewer tap holes must be filled immediately after approval of the plumbing site/slab underground inspection. If the foundation inspection is requested and performed prior to filling the hole, the inspection will be classified as not ready and a re-inspection fee will be assessed and no inspection made.
- If no copper piping is available for bonding of electrical system, alternate bonding method must be installed at the time of the foundation inspection.

Rebar

- Work must conform to plans approved by structural engineer.
- Chairs must be in place with a maximum thirty six (36") inches on center each way and tied.
- Electrical conduit located in the foundation must be installed.
- Jenn Air ducts or other similar down draft vent systems must be shown on approved foundation plans and installed according to the mechanical code.
- All gas lines sleeves must be installed.
- Original finished floor elevation surveys and engineering letters verifying required piers were installed according to design must be submitted prior to requesting the inspection.
- No changes can be made to the foundation after inspection approval without requesting another foundation inspection and supplying new engineer of record design with seal.
- All tub boxes must be installed.
- Sewer lines must run at a ninety (90) degree angle to grade beams.
- All copper must be sleeved or taped. Painting of the copper will not be accepted.
- Water heater T & P lines cannot be composed of PVC Material and cannot be installed in slab.
- Sewer tap holes must be filled immediately after approval of the plumbing site/slab
 inspection. If the foundation inspections is required and performed prior to filling of the
 hole, the inspection will be classified as not ready and a re-inspection fee will be
 assessed.

- If no copper piping is available for bonding of electrical system, alternated bonding method must be installed at the time of foundation inspection.
- Minimum forty (40) bar diameter lap on all steel unless engineer of record states otherwise.
- Minimum of two (2') foot laps in all corner steel and intersection of interior beams to perimeter beam connection.
- Steel substitutions allowed are as follows: two (2) number threes (#3's) for one (1) number four (#4), three (3) number threes (#3's) for one (1) number five (#5), one (1) number three (#3) and one (1)number four (#4) for one (1) number five (#5) or two (2) number fours (#4's) for one (1)number five (#5).
- Minimum six (6) x six (6) six (6) gauge mesh mats for number threes (#3's) on twenty four (24") inch centers in flatwork. NO ROLL MESH ALLOWED.

Piers

- If the foundation has been designed to require piers, the following methods of inspection are acceptable.
- A city inspector can be scheduled to make an A.M. (9:00 11:30) or P.M. (12:30 4:00) inspection for all piers that are completed for inspection at that time. The city inspector will inspect the designed depth and diameter of the pier. Proper concrete reinforcement should be ready for inspection also.
- In lieu of a city inspection, a letter from a State of Texas licensed engineer stating that all piers were placed in accordance with the approved plans and specification will be acceptable. This letter will need to be submitted to the building inspector at the time of the foundation inspection.
- No pier holes to be left uncovered or placed at close of work day.

ELECTRICAL WALL/CEILING (Code 959, 960)

- Romex must be stapled every four and one half (4 ½') feet on the horizontal.
- Romex must be stapled within twelve (12") inches of all boxes.
- Romex extending through masonry must be sleeved properly with the approved material.
- Sheathing on romex must extend a minimum of one fourth (1/4") inches into the box.
- Wire must be clamped to metal boxes.
- Two (2) separate twenty (20) amp circuits must be run for kitchen use. No fixed appliances other than a refrigerator may be put on these circuits.
- A ground must be connected to the cold water piping on the first floor. When water
 heaters are installed on the ground floor the cold water ground must be attached at the
 cold water inlet (cold side) of the water heater. When the water heater is not installed
 on the ground floor the cold water ground must be attached to an alternate cold water

- supply source which is readily accessible. A supplemental (secondary) grounding rod must also be supplied.
- A separate twenty (20) amp laundry circuit must be supplied. No other outlets will be allowed off this circuit.
- All receptacles located outside the building, in the garage, in the bathroom and at the kitchen counter top must be protected by a ground fault circuit interrupter (GFIC).
- Where a panel or disconnect device is tapped more than one (1) time approved lugs shall be provided.
- If service entrance conductors are more than three (3) feet in length there must be a disconnect provided at the outside of the structure and next to the electrical meter.
- All two hundred forty (240) volt appliances must be wired with a four (4) wire system that includes a neutral and separate ground.
- Electrical wiring installed through a bored hole must be protected by a steel plate at least one sixteenth (1/16) inch thick if the edge of the hole is less than one and one fourth (1 ¼) inch from the edge of the wood member.
- All metal boxes must be bonded by a listed means (no wood screws).
- If copper pipe is not present, utilize the concrete encased grounding electrode per the 2005 NEC.
- All N.M. cable must terminate in the device box.

MECHANICAL WALL/CEILING (Code 962, 963)

- Metal ducts shall be screwed, taped and inspected before installation.
- Flexible ducts shall be supported per manufacturers requirements. Maximum spacing for supports is four (4') feet. Some manufacturers require supports every two (2') feet. Turns must be made in such a way that the airflow is not restricted.
- A minimum one (1") inch clearance must be maintained around gas appliance vents. Air conditioning condensation drains must drain into a wet tap. Condensation lines that tie into a washer box must be tied in above the inlet of the washer box.
- Where air conditioning condensation drain pans are located in an attic, a secondary drain must be installed with the condensation line discharging over a window, door, patio or other approved location.
- Condensation drain lines must be a minimum of three fourth (3/4") inches in diameter.
- Bath exhaust fan ducts shall be exhausted directly to the outside.
- Horizontal runs on gravity type water heater and furnace flue vents must not exceed seventy five (75) percent of the height of the vent.
- Dryer vents are limited to a maximum length of twenty five (25') feet. The twenty five (25') foot length includes two (2) ninety (90) degree fittings. Additional fittings over and above the two (2) allowed will reduce the maximum length of the vent by two and one half (2 ½') feet for every forty five (45) degree bend and five (5') feet for each ninety (90) degree bend.

- Dryer vents extending through a roof must include a tight fitting collar.
- Attic access to a gas appliance (water heater or furnace) cannot be accessed from a sleeping area and must be within twenty (20') feet of all furnaces and water heaters.

PLUMBING WALL/CEILING (Code 967, 968)

Water

- All copper, PEX or other approved water lines must be braced.
- All t & P lines must have positive fall towards the outlet of the line. The end of the line must have a ninety (90) degree fitting attached that is pointing down toward the ground. The outlet of the line must terminate no less than six (6) inches and no more than twenty four (24) inches from the top of the ground or floor level. Each water heater must have its own line. T & P lines from separate water heaters cannot be tied together.
- Hose bibs shall be frost proof, and shall be protected by an atmosphere type or pressure type vacuum breaker, or a permanently attached hose connection vacuum breaker. If a permanently attached hose connection vacuum breaker is used, the set screw must be tightened until it breaks off.
- Lead solder and fluxes containing lead are prohibited materials for use in potable water pipes.
- Notching, cutting or boring must not seriously weaken structural member, if so, stud shoes are required.
- All lines within one and a half (1 ½") of the edge of a stud or plate must be strapped
 with a one sixteenth (1/16") inch thick steel and shall cover the area of the pipe where
 the member is notched or bored.
- All water lines in unheated areas must be insulated with a minimum of three fourths (1/2") inch pipe insulation.
- All copper located in the brick ledge must be sleeved or wrapped with ten (10) mil mill wrap.

<u>Sewer</u>

- All vents must extend through the roof with flashing installed at the roof and at least one (1') foot from any wall and at least six (6") inches above the roof.
- A top out water test is required for all plumbing located above slab. Minimum 5' (five) head is required.
- A maximum of seventy two (72") inches is allowed on one and a half (1 $\frac{1}{2}$ ") inch trap arms.

- A maximum of ninety six (96") inches is allowed on two (2") inch trap arms.
- No vents may be less than forty five (45) degrees from the horizontal until they are at least six (6") inches above the flood rim of the fixture.
- Plumbing vents must terminate at least ten (10') feet from or two (2') feet above any window that can be opened.
- Water heaters on the second floor and any other area that could cause damage must have a drip pan.
- All lines within one and a half inches (1 ½") inches of the edge of a stud or plate must be strapped with a one eighth (1/8") inch thick by one and one half (1 ½") inch wide strap.
 The strap must be nailed to the stud or plate using ten (10d) nails. NO ROOFING NAILS ALLOWED.
- Support horizontal runs of PVC piping every four (4') feet on center.
- Shower pans must be set in concrete and secure to the wall. Voids under the shower pan must be eliminated.
- Condensation lines that tie into a washer box must be tied in above the inlet of the washer box.
- Air admittance valves are not allowed unless approved by the Building Official prior to installation.
- Island Loop vents must utilize the following fittings in the order listed? A forty five (45) degree fitting, a sort turn ninety (90) degree fitting and a forty five (45) degree fitting.

Gas Lines

All gas tests must utilize a diaphragm gage that has been tested and certified.

Diaphragm gages: Diaphragm gages are required for gas tests. Gas lines that require a ten (10) p.s.i. text may be tested three (3) p.s.i. when a five (5) p.s.i. diaphragm gage is used. Gas lines that require a sixty (60) p.s.i. test may be tested at ten (10) p.s.i. when a fifteen (15) p.s.i. diaphragm gage is used. A permanent metal tag is required at the meter, at the entrance into the house (if the gas meter is located at the alley), and at the regulator stating the following: "Warning: one half (1/2") inch to five (5) p.s.i. gas line."

- Holes cut for gas lines must only be large enough for the line to penetrate.
- Gas lines must be properly supported.
- Gas lines located between bricks and studs must be factory mill wrapped.
- All gas outlets must have approved gas stops installed along with caps.
- No water, soil or waster pipe can e installed or located outside of a building in an unheated area or in an exterior wall unless adequate provisions are made to protect such lines from freezing.

FRAME (Code 955)

Prior to requesting this inspection, the contractor must pour a temporary or permanent walkway from the street to the building to allow for access to the structure. The walkway must be free of construction materials and debris. No inspection will be performed if access is not provided as specified. All MEP's must pass inspections prior to a frame.

Framing

- Rafter spans must conform with the 2006 IRC and/or 2006 IBC (See attached span chart for specific wood species allowances). SEE SPAN TABLES.
- Sole plates must be pressure treated and secured to the foundation by J-bolts. Power
 actuated fasteners installed per manufacturers specifications, and ICC approved
 alternate method of fastening sole plates to the foundation will be considered.
- Top plate splices must be offset of a minimum of forty eight (48") inches.
- Rafters must be framed directly opposite each other at the ridge. The size of the ridge must be so that it is not less in depth than the cut end of the rafter.
- Valleys and hip rafters must not be less than two (2") inches nominal thickness and not less in depth than the cut end of the rafter.
- Purlins must be the same size as the rafter that it supports. Struts must be installed every four (4') feet from the purlin to the wall or beam at not less than a forty five (45) degree angle from the horizontal. Compound angles will be disapproved.
- Ceiling joists over four (4') feet in length must have proper bearing or a joist hanger must be used. All floor joists and beams must have proper bearing or plate or beam pocket or hangers must be used. No pressure blocks allowed.
- Fur downs, chimneys, ceiling of different heights and vertical wall spaces over ten (10')
 feet must be fire blocked. Poly sealing small homes and gaps in fire-blocks will be
 acceptable.
- See attached header chart for maximum header spans.
- All lumber must be grade stamped. Unstamped lumber or mill grade lumber is unacceptable as a structural framing member.
- Where ceiling joists support air handling units, skylight and water heaters, those joists
 will be calculated as floor joists. Where air handling units are supported by rafters, those
 rafters must be doubled.
- Masonry fireplaces must be completed to a point one (1') foot above the damper.
- Any brick on wood must comply with the city's brick on wood policy. As an option, a design may be submitted by a structural engineer for the brick on wood support.
- Brick wall ties must be installed and be a twenty two (22) gauge minimum using ten (10d) nails. NO ROOF NAILS ALLOWED.
- All penetrations in top plates must be sealed. Small penetrations may be poly sealed.
- Holes in exterior sheathing must be sealed.

- Covered porches and patios must be inspected to verify proper structural framing prior to installing fascia material.
- Cutting, notching or boring of engineered beams is not allowed.
- Rafter, hip and valley splices must be spliced as follows. The spliced member must have a dove tail or an angle cut with a brace directly under the splice running to a load bearing wall. One side of the splice must remain open to allow the inspector to verify the proper cut is made on the splice. The opposite side of the the side left open must have a scab piece splay nailed to the spliced member that is the same size as the hip, rafter or valley. The scab piece must be long enough to extend at least two (2) feet beyond both ends of the splice.
- Required stiff backs shall not be drilled, notched or cut or used for bracing support and must be tied to wall or roof members at ends.
- All plumbing walls must be two (2") inches by six (6") inches.
- Garage short walls must be installed per 602.10.6.2 of the 2006 IRC and or the 2006 IBC.

TEMPORATY CUT IN'S (Code – Electric 924) (Code – Gas 925)

<u>Electric</u>

- All wires must be terminated with a receptacle or blanked off. If appliances and fixtures are on site, all electrical connections to those appliances or fixtures must be complete.
- Cover must be off of breaker box.
- Both grounds installed cold water and ground rod clamps are to be tight.
- Neutral and ground conductors must be properly coded and identified.
- The meter base must be bonded to the main panel box.
- Feeder wires and branch wires must be protected by the proper sized breaker or fuse.
- All receptacles and switches must be installed.
- Bare bulb incandescent lights must not be installed in closet storage areas.
- All light fixtures located within thirty six (36") inches horizontally and less than eight (8') feet above the lip of a bathtub or shower must be waterproof.
- When galvanized nipples are utilized between the meter base and the main electrical panel, bonding bushings must be installed. Fiberglass nipples do not require bonding bushings.
- Arc-fault circuit interrupter devices shall be combination type.

Gas

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A permanent metal tag is required at the meter, at the entrance into the house (if the gas meter is located at the alley), and at the regulator stating the following: "Warning: one half (1/2") inch to five (5) p.s.i. gas line."

- Gas stops at each appliance must be properly secured for all types of piping including CSST systems and readily accessible.
- All gas lines must be connected. Gas stops and caps must be installed on any gas line for future use.
- Gas connectors must not exceed three (3) feet except for clothes dryers and ranges, which must not exceed six (6) feet.
- Where a sediment trap is not incorporated as part of the gas utilization equipment, a sediment trap shall be installed downstream of the equipment shutoff valve.
- Corrugated stainless steel tubing (CSST) must be bonded to the structures electrical system in accordance with NFPA 70 NEC using bonding clamps and using number six (6) AWG per table 250.122 of 2005 NEC.

ELECTRICAL FINAL (Code 961)

- All receptacles must be wired properly.
- All light fixtures must be installed
- All required GFCI and AFCI outlets must be installed and working properly.
- A permanent electrical outlet and light fixture must be provided at or near air conditioning and water heater equipment located in the attic. The light fixture switch must be located at the required attic opening.
- All areas requiring illumination must be switched with a wall type switch.
- Circuits must be labeled in breaker box (in ink).
- The Jacuzzi access panel must be removed for inspection. Jacuzzi access panels must be
 at lease twelve (12) x twelve (12) with clear access to the motor (no pipes, wires, etc.)
 The opening must also be close enough to reach the motor in order to do maintenance
 on it and large enough to remove the motor for repair or replacement. Access must be
 be open at time of inspection.
- Electrical outlets located in garages that are not GFCI protected must be single receptacles and labeled.
- Floor outlet receptacles must be accessible.
- All exterior fixtures shall be sealed.

MECHANICAL FINAL (Code 964)

• Combustion air vents must be installed in the upper twelve (12") inches and lower twelve (12") inches of closets enclosing gas appliances.

- A mechanical heating system must be operational that is capable of maintaining a temperature of sixty eight (68) degrees fahrenheit at a point that is three (3') feet above floor level and two (2') feet from exterior walls in all habitable rooms at the design temperature.
- Vent fans must be operational in bath and utility rooms. Where a water closet is separated from the shower area by a door, a separate bath fan is required in water closet area and the shower area.
- A solid walkway at least thirty (30") inches wide must be installed from attic openings to furnaces, water heaters and gas regulators. The distance from the opening to the equipment cannot be any further than twenty (20') feet. A thirty (30') inch deep level working space shall be present along all sides of the appliance where access is required.

PLUMBING FINAL (Code 969)

- All gas lines must be connected. Gas stops and caps must be installed on any gas line installed for future use.
- All plumbing fixtures must be installed. Any drain or water line that is installed for future use or expansion must have permanent caps.
- Frost proof hose bibs with integral vacuum breakers must be installed.
- Sewer cleanouts must be cut so that the top of the cleanout is between one (1") inch and two (2") inches from the top of the ground.
- Hot water must correspond to the left side of fittings on plumbing fixtures.
- Unions must be installed within twelve (12") inches of regulation equipment, water heaters, conditioning tanks, or other similar equipment. Flexible water connectors can be used in place of unions.
- PVC vent stacks must be painted with latex paint.
- Air gap fittings must be installed on all dishwashers.
- Shower doors must have a minimum opening clearance of twenty four (24") inches.
- Gas Sediment trap on gas water heaters and HVAC units.
- Need 6" clearance under water meter.

GAS TEST (Code 970)

Diaphragm gages: Diaphragm gages are required for gas tests. Gas lines that require a ten (10) p.s.i. text may be tested three (3) p.s.i. when a five (5) p.s.i. diaphragm gage is used. Gas lines that require a sixty (60) p.s.i. test may be tested at ten (10) p.s.i. when a fifteen (15) p.s.i. diaphragm gage is used. A permanent metal tag is required at the meter, at the entrance into the house (if the gas meter is located at the alley), and at the regulator stating the following: "Warning: one half (1/2") inch to five (5) p.s.i. gas line."

BUILDING/LIFE SAFETY (Code 956)

- A solid walkway at least thirty (30") inches wide must be installed from attic openings to furnaces, water heaters and gas regulators. The distance from the opening to the equipment cannot be any further than twenty (20') feet. A thirty (30") inch wide and thirty (30") inch deep level working space shall be present along all side of the appliance where access is required.
- Chimneys must extend at least two (2') feet above any point within ten (10') feet of the roof.
- Street, alley and all flatwork must be clean and clear of mud and debris.
- Yard must be clear of debris and final grade completed and all landscape complete.
- A self closing solid core door must be installed between the garage and living area.
- A permanent address must be installed on the front and rear of the house (rear address
 is only required when driveway access is provided from the alley) with numbers of
 contrasting color to background.
- Energy report shall be submitted prior to inspection.
- Saw cut and hot dipped tar or Air-Bloc 06 at driveway per City of Wylie engineers design.

This packet is only intended to be a helpful reference. Therefore, the above requirements are only a general list of building, electrical, plumbing and mechanical code regulations. In the event that any material in the handout is found to be inconsistent with the applicable building code, the building code requirement will prevail. For a complete list of building requirements refer to:

2006 International Building Code (IBC)

2006 International Residential Code (IRC)

2005 National Electrical Code (NEC)

2006 International Plumbing Code (IPC)

2006 International Mechanical Code (IMC)

2006 International Fuel Gas Code (IFGC)

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